

Space Nutrition



Volume 2

A Hypothesis Is Born

Issue #8



Plans for ISS

The Expedition 7 crew is now on the International Space Station. They launched from Russia on April 26th, and will stay on the ISS for about 6 months. The two crew members are Ed Lu from NASA, and Yuri Malenchenko from the Russian Space Agency. Ed Lu is a physicist who grew up in New York and Hawaii. He has flown on two Space Shuttle missions, including one that visited the ISS.



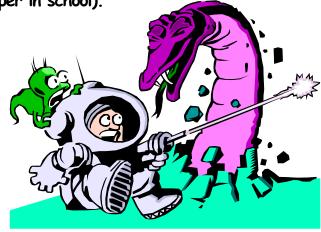
Matt from TX asks -How big is the International Space Station?

The ISS currently weighs 198 tons, and is 171 feet long, 240 feet wide, and 90 feet high! Pretty big for a 2-year old, and there is still a lot more growing to do.

Send your questions to:

Space Nutrition Newsletter Nutritional Biochemistry Laboratory Mail Code SK3 NASA - Johnson Space Center Houston, TX 77058 Before a research study can begin, a proposal must be written to obtain funding (money) for the study. We are preparing for this first step in the research process - proposal writing. While this may not be as exciting as other stages of the scientific process, this is the step that makes it all happen.

NASA Headquarters in Washington, D.C. sends out "a call for proposals" to scientists across the nation. This year, the call for Life Sciences proposals came in April, and the completed proposals are due in July. That gives us the next 3 months to think, read, outline, draft, edit, write, and rewrite to produce the final product (much like writing a term paper in school).



All of the proposals are reviewed by a separate group of scientists to determine the scientific quality of the proposals. Each proposal gets a score, and detailed comments are sent back to the investigators who submitted the proposal. All of the experiments that pass this review process are then reviewed by people at NASA Headquarters, and they select the most important ones for funding (usually more proposals are approved than can be paid for by the money available).

The reviews are very thorough and every detail of the proposal is examined. After all that, there still might not be enough money to do the experiment! Here in the Nutritional Biochemistry Laboratory, we are ready to write - and hoping for the best ...

Did you know?

- Proposals must clearly define everything about the experiment why it needs to be done, how it will be done, what the scientists expect to find, and what impact the findings will have on NASA and the nation.
- Scientists from universities all over the United States send in proposals, along with scientists here at NASA.
 The competition is very tough.
- Proposal writing is one of the hardest parts of being a scientist. When completed, the proposals are usually 60 to 70 pages, including the 20 pages that describe the experiment itself!
- Some proposals may include analogs, or models, of spaceflight to test the research hypothesis. Bed rest is one analog, and it is often called "simulated microgravity". Next month you will learn about a different kind of analog. Instead of going out to space, we go in the opposite direction ...



Word of the Month

Abstract

Can you guess what this word means? Look for the meaning of the "Word of the Month" in the next issue of Space Nutrition



Find these research words:

Data

Hypothesis

	Source Results Proposal Problem			Subjects Conclusions Abstract Procedures				
S	T	C	E	J	В	U	S	L
P	M	M	Α	R	S	V	Α	C
R	E	C	R	U	Ο	S	W	S
O	L	S	N	S	O	I	C	N
C	В	O	O	P	E	S	V	O
E	0	Α	0	Α	L	E	E	I
D	R	R	T	C	E	Н	M	S
U	P	E	I	Α	T	T	S	U
R	S	S	R	R	D	O	N	L
E	M	U	T	K	N	P	Y	C
S	T	L	U	I	D	Y	S	N
P	R	T	Α	D	D	Н	Α	O
Α	В	S	T	R	Α	C	T	C

Check out these cool NASA links for more fun space science facts!

 $\verb|http://www.nasa.gov/audience/forkids/index.htm||$

http://virtualastronaut.jsc.nasa.gov

http://lsda.jsc.nasa.gov

http://www.spaceflight.nasa.gov http://spaceresearch.nasa.gov



Check out our new look!

http://haco.jsc.nasa.gov/biomedical/nutrition/

Look for more information about nutrition and space on the Nutritional Biochemistry Laboratory's Website.